LT-3600RF
LED RGB Controller

User's Manual

(Please read this manual carefully before use)

Forward

Thanks for choosing our LT-3600RF RGB Controller. Before installation and usage, we strongly recommend you to read through this manual carefully.

After-Sales

From the day you purchase our products within a year, if being used properly in accordance with the instruction, and quality problems occur, we provide free repair or replacement services except the following cases:

1. Any defects caused by wrong operations..
2. Any damages caused by inappropriate power supply or abnormal voltage.
3. Any damages caused by unauthorized removal, maintenance, modifying circuit, incorrect connections and replacing chips.
4. Any damages due to transportation, breaking, flooding water after the purchase.
5. Any damages caused by earthquake, fire, flood, lightning strike etc force majeure of natural disasters.
6. Any damages caused by negligence, inappropriate storing at high temperature and humidity environment or near harmful chemicals.
7. Product has been updated.

Safety warnings ⚠

1. Please don't install this controller in lightening, intense magnetic and high-voltage fields.
2. To reduce the risk of component damage and fire caused by short circuit, make sure correct connection
3. Always be sure to mount this unit in an area that will allow proper ventilation to ensure a fitting temperature.
4. Check if the voltage and power adapter suit the controller (please select DC12-24V power supply with constant voltage)
5. Don't connect cables with power on, make sure a correct connection and no short circuit checked with instrument before power on.
6. Please don't open controller cover and operate if problems occur.

The manual is only suitable for this model, any update is subject to change without prior notice.

Product Brief

LT-3600RF multi functional LED controller is a universal RGB controller with high-performance, adopted the most advanced PWM control technology. It's dedicated to control overall RGB color changes of LED lights with 4-pin wires (common anode), such as RGB LED module, LED strip, LED tape, and other LED lights.

This controller can work with Power Repeater to expand the power output, realizing infinite power expansion to connect any quantity of LED lights.

Ⅰ. Technical Specs

LT-3600RF (Common Anode)

Input voltage	DC12V～DC24V
Max current load	6A/3CHs
Max output power	220W/450W(12V/24V)
Scale levels	256 steps per RGB
Remote control distance	50m with obstacles:100m without obstacles
Dimension	L211×W40×H30(mm)
Package Size	L293×W43×H33(mm)
Weight (G.W)	210g

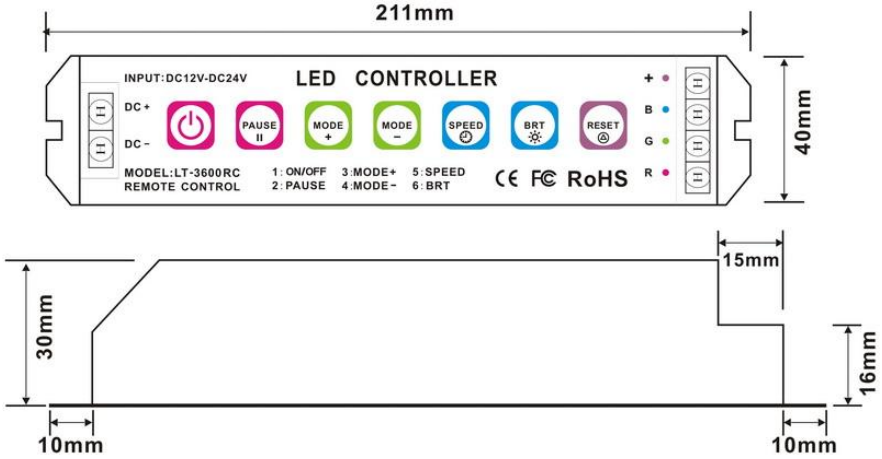
Ⅱ. Features

1. Controlled both by manual buttons and its fitting remoter, reliable control distance can reach as far as 50m.
2. Auto adaptable for LED lights with voltage from DC12-24V.
3. 3-channels with 256 grey-steps per RGB, delicate&gentle for color gradation, without any flicker.
4. With 17 modes such as color gradation, color skipping, horserace, strobing, etc.
5. Static single color is selectable,speed&brightness are adjustable,

with pause function. Can restore to default settings with the newly added RESET button.

6. Can stay at the current color and grey-step by selecting PAUSE function.
7. Can restore to default settings by pressing RESET key.
8. The output power can be expanded unlimitedly with our LED power repeater.

Ⅲ. Product Dimension



Ⅳ. Tables of changing modes

Sequence	Modes	Description
1	Static red	Static red, brightness adjustable
2	Static green	Static green, brightness adjustable
3	Static blue	Static blue, brightness adjustable
4	Static yellow	Static yellow, brightness adjustable
5	Static purple	Static purple, brightness adjustable
6	Static cyan	Static cyan, brightness adjustable
7	Static white	Static white, brightness adjustable
8	3 color skipping	Red, green and blue 3-color skipping
9	7 color skipping	Red, green, blue, yellow, purple, cyan, white 7-color shipping
10	White color strobe	White（with all red, green and blue on）strobe

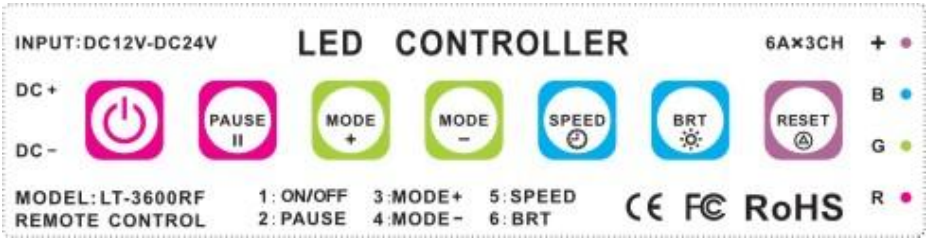
11	3 color smooth	Red, green and blue 3-color gradual changes
12	Full color smooth	All 7-color gradual changes
13	RG color smooth	Red, green 2-color gradual changes
14	R B color smooth	Red, blue 2-color gradual changes
15	GB color smooth	Green, blue 2-color gradual changes
16	White color fade & change	white（with red, green & blue on） gradual bright & fade
17	Great cycle	All changing modes overlap cycle

Ⅴ, Operating instructions

The controller, there are 7 function keys:

ON/OFF、PAUSE、MODE+、MODE-、SPEED、BRT、RESET

the first 6 buttons correspond to Buton1,2,3,4,5,6 in the remote controller.

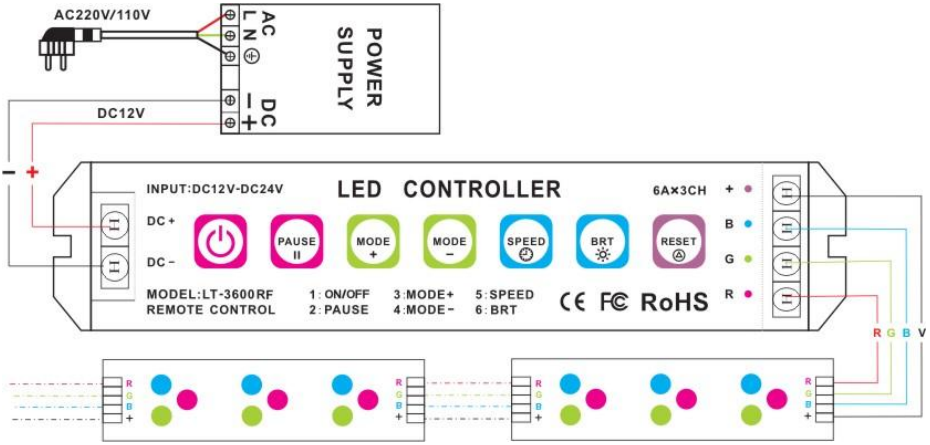


ON/OFF、PAUSE、MODE+、MODE-、SPEED、BRT、RESET

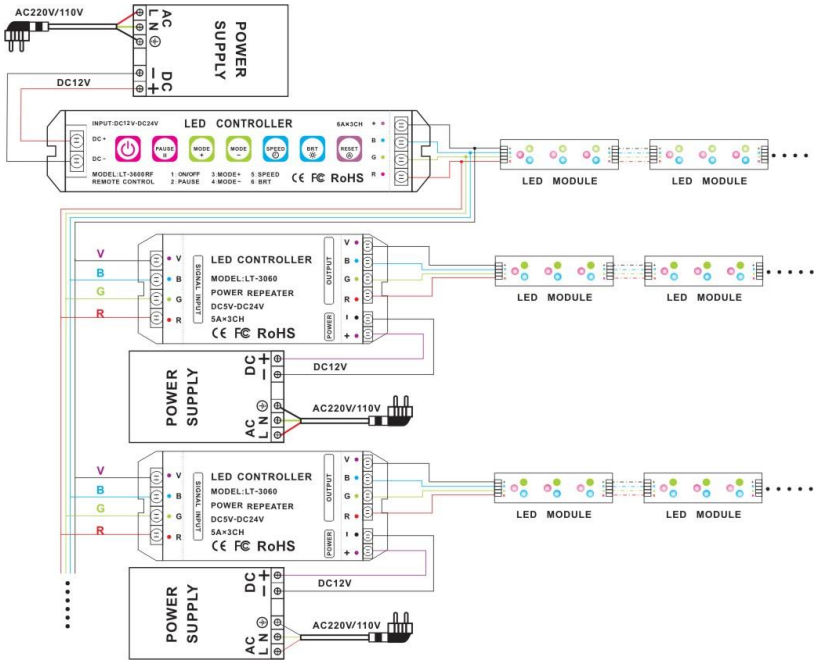
Sign	Button	RC	Description
	ON/OFF	**1**	**ON/OFF**：Turn on/off the controller Any button can start the controller at off status

	PAUSE	**2**	**Pause**：Press this button will rest at current color, press it again, will continue to change.
	MODE+	**3**	**Mode+**：Press this button to select next mode
	MODE-	**4**	**Mode-**：Press this button & back to previous mode
	SPEED	**5**	**Speed**：Press this button to select 1-8 speed changing levels.
	BRT	**6**	**Brightness**：Press this button to select 1-8 brightness adjustment levels.
	RESET	**/**	**Reset**：Press it a second, enter Cycle mode；Press this button over 3 seconds，if LED flickers twice, it means it has restored to Default status successfully.

Ⅵ.Conjunction sketch map（connected to LED module as an example）



Ⅶ. Conjunction diagram, working with our LT-3060 power repeater （connected to LED module as an example）



Ⅷ. Exception Handles

Malfunction	Causation	Settle
Incorrect color Amplifier not in phase	4. Incorrect RGB output wire connection 5. Incorrect in-phase connection	1、 Re-connect RGB wires correspondently 2、 Re-connect in-phase wires correspondently
No changes from certain mode	7. Speed is too slow	3、 Press Speed to accelerate
Uneven brightness between front and rear, with voltage drop	8. Output cable is too long 9. Wire diameter is too small 10. Overload beyond controller capability	8. Reduce cable or use loop circuit. 9. Change wider wire 10. add power amplifier
Remote controlling unavailable	11. Battery without power 12. Out of remote-control distance	1. Change battery 2. Reduce remote-control distance